



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|-------------------|
| 09/973,338 | 10/09/2001 | Wayne Milton Schott | US 010480 | 6212 |
| 24737 | 7590 | 06/07/2004 | EXAMINER | |
| PHILIPS INTELLECTUAL PROPERTY & STANDARDS | | | | MCCLOUD, RENATA D |
| P.O. BOX 3001 | | | | ART UNIT |
| BRIARCLIFF MANOR, NY 10510 | | | | PAPER NUMBER |
| | | | | 2837 |

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|----------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/973,338 | SCHOTT, WAYNE MILTON |
| | Examiner | Art Unit |
| | Renata McCloud | 2837 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 March 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-20 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments, filed 15 March 2004, with respect to claims 1-20 have been fully considered and are persuasive. The non-final rejection of 14 January 2004 has been withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Festa (US 4,437,539).

Claim 1: An acoustical enclosure comprising: a speaker box (Fig. 1: 12) comprising walls (Fig. 1-2: 14,16,18, 20, 26, 28) that enclose an acoustic chamber; a partitioning wall (Fig. 2:30) coupled to interior surfaces of said walls of said speaker box, said partitioning wall dividing said acoustic chamber into a first chamber (Fig. 2:34) and into a second chamber (Fig. 2: chamber adjacent to 20); wherein at least one wall (Fig. 2: 28) of said walls that enclose said acoustic chamber comprises portions that form an external vent (Fig. 2: 40) to said second chamber (chamber adjacent to 20); a first speaker (Fig. 2: 35 is the speaker within opening 36) mounted within said partitioning wall (30), wherein a front portion of said first speaker (35) has access to said first

chamber (34) and a back portion of said first speaker (35) has access to said second chamber (chamber adjacent to 20); and a second speaker mounted (Fig. 2: 50) within one of said walls (26) that enclose said acoustic chamber, wherein a front portion of said second speaker (50) has access to air outside said speaker box and a back portion of said second speaker (50) has access to said first chamber (34).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tanaka et al (US 5,850,460).

Claim 1: An acoustical enclosure comprising: a speaker box (Fig. 15: 103) comprising walls that enclose an acoustic chamber (Fig. 15:106,105); a partitioning wall (Fig. 15:104) coupled to interior surfaces of said walls of said speaker box, said partitioning wall (104) dividing said acoustic chamber into a first chamber (106) and into a second chamber (105); a first speaker (101) mounted within said partitioning wall (104), wherein a front portion of said first speaker (front of 101) has access to said first chamber (106) and a back portion of said first speaker (back of 101) has access to said

second chamber (105), and a second speaker (102) mounted within one of said walls (Fig. 15: 103a) that enclose said acoustic chamber, wherein a front portion of said second speaker (front of 102) has access to air outside said speaker box (103) and a back portion of said second speaker (back of 102) has access to said first chamber (106).

Tanaka et al do not explicitly disclose at least one wall that enclose the acoustic chamber comprises portions that form an external vent to said second chamber. Tanaka et al teaches that it would be obvious to one having ordinary skill in the art at the time the invention was made to form an external vent (Col. 7:60-8:2, a port in a wall that has no driver) to said second chamber (105), the vent being in at least one wall of the walls (Fig. 15: back wall adjacent to 105) that enclose said acoustic chamber. The advantage of this would be reduced vibrations in the enclosure.

Claims 9 and 11: An acoustical enclosure comprising: a speaker box (Fig. 15: 103) comprising walls that enclose an acoustic chamber (Fig. 15:106,105); a partitioning wall (Fig. 15:104) coupled to interior surfaces of said walls of said speaker box, said partitioning wall (104) dividing said acoustic chamber into a first chamber (106) and into a second chamber (105); wherein at least one wall of said walls (Fig. 15: back wall adjacent to 105) that enclose said acoustic chamber comprises portions that form an external vent (Col. 7:60-8:2, a port in a wall that has no driver) to said second chamber (105); a first speaker (101) mounted within said partitioning wall (104), wherein a front portion of said first speaker (front of 101) has access to said first chamber(106) and a

back portion of said first speaker (back of 101) has access to said second chamber (105), and a second speaker (102) mounted within one of said walls (Fig. 15: 103a) that enclose said acoustic chamber, wherein a front portion of said second speaker (front of 102) has access to air outside said speaker box (103) and a back portion of said second speaker (back of 102) has access to said first chamber (106); wherein second speaker (102) enhances acoustical performance of said acoustic chamber of said acoustical enclosure by extending a range of low frequency response of said acoustical enclosure to approximately thirty Hertz (Col. 2:12-20; Col. 2:42-45; Fig. 3 shows a frequency range starting at 20 Hz).

Tanaka et al do not explicitly disclose at least one wall that enclose the acoustic chamber comprises portions that form an external vent to said second chamber. Tanaka et al teaches that it would be obvious to one having ordinary skill in the art at the time the invention was made to form an external vent (Col. 7:60-8:2, a port in a wall that has no driver) to said second chamber (105), the vent being in at least one wall of the walls (Fig. 15: back wall adjacent to 105) that enclose said acoustic chamber. The advantage of this would be reduced vibrations in the enclosure.

Claims 2, 4, 6, 8, 10, 13, 15, 16, 18, and 20: partitioning wall (104) comprises portions that form an uncovered internal vent (Col. 7:60-8:2, a port in a divider) between said first chamber (106) and said second chamber (105).

Claims 3, 12, and 19: said first speaker (101) and said second speaker (102) are connected in phase electrically (Col. 1:65-2:12; Col. 6:35-42).

Claims 5, 14, and 17: a volume of said first chamber (106) is effectively increased due to the presence of said second speaker (102) within one of said walls (103a) that enclose said acoustic chamber (Col. 2:12-20).

Claim 7: a low frequency response range that extends to approximately thirty Hertz (Col. 2:42-45; Fig. 3 shows a frequency range starting at 20 Hz).

Response to Arguments

6. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renata McCloud whose telephone number is (571) 272-2069. The examiner can normally be reached on Mon.- Fri. from 8 am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2800 ext. 4. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Renata McCloud
Examiner
Art Unit 2837

RDM



DAVID MARTIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800